

ABSTRACT

There is provided a roller screw comprising: a screw shaft 1 formed, on an outer peripheral surface thereof, with a spiral roller rolling groove 1a; a nut member 2 formed, on an inner peripheral surface thereof, with a spiral loaded roller rolling groove 2a opposing to the roller rolling groove 1a of the screw shaft; and a number of rollers 6 disposed between the roller rolling groove 1a and the loaded roller rolling groove 2a. A number of rollers 6 are arranged in cross shape and each of the rollers has a diameter D larger than a prescribed dimension. According to such roller screw, an optimum preload can be applied in accordance with the roller screw structure, thereby improving the rigidity of the roller screw.